IN THE CLAIMS:

1.   (Currently Amended): A <u>computer implemented</u> method for processing shared data comprising:

       receiving a request to perform a task on shared data;

       creating a work item message for the task; and

       publishing the work item message to a messaging service <u>by posting the work item message to a topic of the messaging service based on a type of the task, wherein the topic is a category by which messages in the messaging service are sorted.</u>

2.   (Currently Amended): The<u>computer implemented</u> method of claim 1, wherein the <u>type of the</u> task is one of an edit task <u>for modifying an unlocked node</u> and a locking task <u>for locking an unlocked node</u>.

3.   (Currently Amended): The <u>computer implemented</u> method of claim 2, wherein ~~the step of publishing the work item message comprises~~ posting the work item message to <u>a topic comprises posting the work item message to</u> an edit topic <u>with a filter value set to all nodes, wherein the edit topic is a category identifying non-transaction requests for unlocked nodes</u>.

4.   (Currently Amended): The <u>computer implemented</u> method of claim 1, wherein the <u>type of the</u> task is one of an edit task <u>for modifying a locked node</u> and an unlocking task <u>for unlocking a locked node</u>.

5.   (Currently Amended): The <u>computer implemented</u> method of claim 4, wherein ~~the step of publishing the work item message comprises~~ posting the work item message to a <u>topic comprises posting the work item message to a</u> transaction topic <u>with a filter value set to a node originating the request, wherein the transaction topic is a category identifying transaction requests for locked nodes</u>.

6.   (Currently Amended): A <u>computer implemented</u> method for processing shared data comprising:

       receiving a work item message from a messaging service <u>by consuming the work item</u>

message from a topic of the messaging service, wherein the topic is a category by which messages in the messaging service are sorted;

  processing the work item message based on the topic; and

  publishing a result to a result topic of the messaging service, wherein the result topic is a category identifying results of processing the work item message.

7. (Currently Amended): The computer implemented method of claim 6, wherein the step of receiving a work item message consuming the work item message from a topic comprises consuming [[a]] the work item message from an edit topic, wherein the edit topic is a category identifying non-transaction requests for unlocked nodes, and wherein the work item message consumed from the edit topic has a filter value set to all nodes.

8. (Currently Amended): The computer implemented method of claim 7, further comprising placing the work item message in an edit queue, wherein the edit queue comprises a plurality of work item messages received from the messaging service.

9. (Currently Amended): The computer implemented method of claim 8, wherein the step of processing the work item message comprises:

  determining whether the work item message was created by a current server cluster node based on the filter value; and

  performing a request task corresponding to the work item message if the work item message was created by the current server cluster node.

10. (Currently Amended): The computer implemented method of claim 9, wherein the step of processing the work item message further comprises:

  waiting until the work item message is removed from the edit queue if the work item message was not created by the current server cluster node.

11. (Currently Amended): The computer implemented method of claim 7, wherein the work item message comprises a locking request for locking an unlocked node.

12.   (Currently Amended): The <u>computer implemented</u> method of claim 11, wherein ~~the step~~ ~~of~~ processing the work item message comprises locking a portion of [[the]] shared data.

13.   (Currently Amended): The <u>computer implemented</u> method of claim 6, wherein ~~the step~~ ~~of receiving a work item message~~ <u>consuming the work item message from a topic</u> comprises consuming [[a]] <u>the</u> work item message from a transaction topic<u>, wherein the transaction topic is a category identifying transaction requests for locked nodes, and wherein the work item message consumed from the transaction topic has a filter value set to an identifier of a locking node</u>.

14.   (Currently Amended): The <u>computer implemented</u> method of claim 13, wherein ~~the step~~ ~~of~~ processing the work item message comprises:

performing a request task corresponding to the work item message on a clone of at least a portion of [[the]] shared data.

15.   (Currently Amended): The <u>computer implemented</u> method of claim 13, wherein the work item message comprises an unlocking request <u>for unlocking a locked node</u>.

16.   (Currently Amended): The <u>computer implemented</u> method of claim 15, wherein ~~the step~~ ~~of~~ processing the work item message comprises unlocking at least a portion of [[the]] shared data.

17.   (Currently Amended): The <u>computer implemented</u> method of claim 16, wherein the result comprises a modified portion of the shared data.

18.   (Currently Amended): A <u>computer implemented</u> method for processing shared data comprising:

receiving a result from <u>a result topic of</u> a messaging service<u>, wherein the result topic is a category identifying results of processing work item messages</u>;

processing the result <u>based on a type of the result</u>; and

updating [[the]] shared data based on <u>a brand of</u> the result<u>, wherein the brand of the result identifies one of a current node and all nodes</u>.

19.   (Currently Amended): The computer implemented method of claim 18, wherein the step of processing the result comprises modifying the shared data in persistent storage if the brand of the result is a current node.

20.   (Currently Amended): The computer implemented method of claim 18, wherein the step of processing the result comprises updating the shared data in memory if the brand of the result is a current node.

21.   (Currently Amended): An apparatus A data processing system for processing shared data comprising:
    a bus,
    a storage device, wherein the storage device contains computer usable code;
    a communications unit connected to the bus; and
    a processing unit connected to the bus, wherein the processing unit executes the computer usable code to receipt means for receiving receive a request to perform a task on shared data;
    creation means for creating create a work item message for the task; and
    publication means for publishing publish the work item message to a messaging service by posting the work item message to a topic of the messaging service based on a type of the task, wherein the topic is a category by which messages in the messaging service are sorted.

22.   (Currently Amended): The apparatus data processing system of claim 21, wherein the type of the task is one of an edit task for modifying an unlocked node and a locking task for locking an unlocked node.

23.   (Currently Amended): The apparatus data processing system of claim 22, wherein the publication means comprises means for posting processing unit, in executing the computer usable code to post the work item message to a topic of the messaging service based on a type of the task, executes the computer usable code to post the work item message to an edit topic with a filter value set to all nodes, wherein the edit topic is a category identifying non-transaction requests for unlocked nodes.

24.   (Currently Amended): The ~~apparatus~~ data processing system of claim 21, wherein the type of the task is one of an edit task for modifying a locked node and an unlocking task for unlocking a locked node.

25.   (Currently Amended): The ~~apparatus~~ data processing system of claim 24, wherein the ~~publication means comprises means for posting~~ processing unit, in executing the computer usable code to publish the work item message to a messaging service by posting the work item message to a topic of the messaging service based on a type of the task, executes the computer usable code to post the work item message to a transaction topic with a filter value set to a node originating the request, wherein the transaction topic is a category identifying transaction requests for locked nodes.

26.   (Currently Amended): ~~An apparatus~~ A data processing system for processing shared data comprising:

    a bus,
    a storage device, wherein the storage device contains computer usable code:
    a communications unit connected to the bus; and
    a processing unit connected to the bus, wherein the processing unit executes the computer usable code to ~~receipt means for receiving~~ receive a work item message from a messaging service by consuming the work item message from a topic of the messaging service, wherein the topic is a category by which messages in the messaging service are sorted;

        ~~processing means for processing~~ process the work item message based on the topic; and

        ~~publication means for publishing~~ publish a result to a result topic of the messaging service, wherein the result topic is a category identifying results of processing the work item message.

27.   (Currently Amended): The ~~apparatus~~ data processing system of claim 26, wherein the ~~receipt means comprises means for consuming~~ processing unit, in executing the computer usable code to receive a work item message from a messaging service by consuming the work item message from a topic of the messaging service, executes the computer usable code to consume a

work item message from an edit topic, wherein the edit topic is a category identifying non-transaction requests for unlocked nodes, and wherein the work item message consumed from the edit topic has a filter value set to all nodes.

28.   (Currently Amended): The ~~apparatus~~ data processing system of claim 27, wherein the processing unit further ~~comprising means for placing~~ executes the computer usable code to place the work item message in an edit queue, wherein the edit queue comprises a plurality of work item messages received from the massaging service.

29.   (Currently Amended): The ~~apparatus~~ data processing system of claim 28, wherein the processing unit, in executing the computer usable code to process the work item message based on the topic, executes the computer usable code to ~~processing means comprises:~~
        ~~means for determining~~ determine whether the work item message was created by a current server cluster node based on the filter value; and
        ~~means for performing~~ perform a request task corresponding to the work item message if the work item message was created by the current server cluster node.

30.   (Currently Amended): The ~~apparatus~~ data processing system of claim 29, wherein the processing unit, in executing the computer usable code to process the work item message based on the topic, executes the computer usable code to ~~processing means further comprises:~~
        ~~means for waiting~~ wait until the work item message is removed from the edit queue if the work item message was not created by the current server cluster node.

31.   (Currently Amended): The ~~apparatus~~ data processing system of claim 27, wherein the work item message comprises a locking request for locking an unlocked node.

32.   (Currently Amended): The ~~apparatus~~ data processing system of claim 31, wherein the processing unit, in executing the computer usable code to process the work item message based on the topic, executes the computer usable code to ~~processing means comprises means for locking~~ lock a portion of [[the]] shared data.

33. (Currently Amended): The ~~apparatus~~ data processing system of claim 26, wherein the ~~receipt means comprises means for consuming~~ processing unit, in executing the computer usable code to receive a work item message from a messaging service by consuming the work item message from a topic of the messaging service, executes the computer usable code to consume a work item message from a transaction topic, wherein the transaction topic is a category identifying transaction requests for locked nodes, and wherein the work item message consumed from the transaction topic has a filter value set to an identifier of a locking node.

34. (Currently Amended): The ~~apparatus~~ data processing system of claim 33, wherein the ~~processing means comprises:~~ processing unit, in executing the computer usable code to process the work item message based on the topic, executes the computer usable code to perform ~~means for performing~~ a request task corresponding to the work item message on a clone of at least a portion of [[the]] shared data.

35. (Currently Amended): The ~~apparatus~~ data processing system of claim 33, wherein the work item message comprises an unlocking request for unlocking a locked node.

36. (Currently Amended): The ~~apparatus~~ data processing system of claim 35, wherein the ~~processing means comprises means for unlocking~~ processing unit, in executing the computer usable code to process the work item message based on the topic, executes the computer usable code to unlock at least a portion of [[the]] shared data.

37. (Currently Amended): The ~~apparatus~~ data processing system of claim 36, wherein the result comprises a modified portion of the shared data.

38. (Currently Amended): ~~An apparatus~~ A data processing system for processing shared data comprising:

    a bus,

    a storage device, wherein the storage device contains computer usable code;

    a communications unit connected to the bus; and

    a processing unit connected to the bus, wherein the processing unit executes the computer usable code to ~~receipt means for receiving~~ receive a result from a result topic of a messaging

service, wherein the result topic is a category identifying results of processing work item messages;

    ~~processing means for processing~~ process the result based on a type of the result; and

    ~~update means for updating~~ update the shared data based on a brand of the result, wherein the brand of the result identifies one of a current node and all nodes.

39.   (Currently Amended): The ~~apparatus~~ data processing system of claim 38, wherein the ~~processing means comprises means for modifying~~ processing unit, in executing the computer usable code to process the result based on a type of the result, executes the computer usable code to modify the shared data in persistent storage if the brand of the result is a current node.

40.   (Currently Amended): The ~~apparatus~~ data processing system of claim 38, wherein the ~~processing means comprises means for updating~~ processing unit, in executing the computer usable code to process the result based on a type of the result, executes the computer usable code to update the shared data in memory if the brand of the result is a current node.

41.   (Currently Amended): A computer program product, ~~in a computer readable medium,~~ for processing shared data, the computer program product comprising:

    a computer usable medium having computer usable program code embodied therein, the computer usable program code comprising:

        computer usable program code configured to ~~instructions for receiving~~ receive a request to perform a task on shared data;

        computer usable program code configured to ~~instructions for creating~~ create a work item message for the task; and

        computer usable program code configured to ~~instructions for publishing~~ publish the work item message to a messaging service by posting the working item message to a topic of the messaging service based on a type of the task, wherein the topic is a category by which messages in the messaging service are sorted.

42.   (Currently Amended): A computer program product, ~~in a tangible computer readable medium,~~ for processing shared data, the computer program product comprising:

    a computer usable medium having computer usable program code embodied therein, the

computer useable program code comprising:

computer usable program code configured to ~~instructions for receiving~~ receive a work item message from a messaging service by consuming the work item message from a topic of the messaging service, wherein the topic is a category by which messages in the messaging service are sorted;

computer usable program code configured to ~~instructions for processing~~ process the work item message based on the topic; and

computer usable program code configured to ~~instructions for publishing~~ publish a result to a result topic of the messaging service, wherein the result topic is a category identifying results of processing the work item message.

43.   (Currently Amended): A computer program product, ~~in a computer readable medium,~~ for processing shared data, the computer program product comprising:

a computer usable medium having computer usable program code embodied therein, the computer usable program code comprising:

computer usable program code configured to ~~instructions for receiving~~ receive a result from a result topic of a messaging service, wherein the result topic is a category identifying results of processing work item messages;

computer usable program code configured to ~~instructions for processing~~ process the result based on a type of the result; and

computer usable program code configured to ~~instructions for updating~~ update the shared data based on a brand of the result, wherein the brand of the result identifies one of a current node and all nodes.